

I claim:

1. A telescope, comprising:

a main tube comprising a crosshair plate movably arranged in an intermediate image plane,  
a vertical drive and a horizontal drive by which the crosshair plate is movable relative to the main tube,

and,

an index plate associated with the crosshair plate and tiltably mounted in the main tube.

2. The telescope according to claim 1, wherein the index plate is mounted such that the index plate is always aligned parallel to the crosshair plate.

3. The telescope according to claim 2, further comprising a reversal system comprising an inner tube having an abutment surface, and a holder carrying the index plate that abuts on the abutment surface.

4. The telescope according to claim 1, wherein the index plate comprises a lateral guide.

5. The telescope according to claim 1, further comprising an adjusting element,

wherein the index plate is movable relative to the main tube by means of the

adjusting element.

6. A telescope, comprising:

a main <sup>3</sup>tube comprising a crosshair <sup>19</sup>plate movably arranged in an intermediate image plane,  
a vertical drive and a horizontal drive by which the crosshair plate is movable relative to the main tube,  
an index <sup>29</sup>plate associated with the crosshair plate and tiltably mounted in the main tube, and  
an adjusting <sup>39</sup>element,  
wherein the index plate is movable relative to the main tube by means of the adjusting element,  
and wherein the adjusting element is in effective connection to the index plate by means of a spherical <sup>45</sup>surface.

7. The telescope according to claim 1, further comprising

a holder <sup>21</sup>for the crosshair <sup>19</sup>plate, and  
a holder <sup>30</sup>for the index <sup>29</sup>plate that abuts on one of the holder <sup>21</sup>of the crosshair plate or on a component securely connected to the crosshair plate.

8. The telescope according claim 5, further comprising a spring <sup>47</sup>element that cooperates with the adjusting <sup>39</sup>element.

9. The telescope according claim 1, comprising a reversal system comprising a holder,<sup>9</sup>  
wherein the crosshair plate<sup>19</sup> is securely connected to the holder of the reversal system.
10. The telescope according to claim 1, comprising  
a holder<sup>21</sup> for the crosshair plate<sup>19</sup>,  
a holder<sup>30</sup> for the index plate<sup>29</sup>, and  
a lateral guide on the holder for the crosshair plate and on the holder for the index plate.
11. The telescope according to claim 1, wherein the crosshair plate and the index plate are spaced at a constant distance of less than 0.1 mm.
12. The telescope according to claim 11, wherein the constant distance is less than 0.05 mm.
13. The telescope according to claim 1, wherein the index plate comprises line markings<sup>20</sup> and vertical distances between individual lines of the line markings are different in magnitude.
14. A process for producing a telescope according to claim 1, comprising the steps of pre-assembling the index plate and the crosshair plate outside the main tube.

15. The process according to claim 14, further comprising the step of introducing an inner tube in which the crosshair plate and the index plate are arranged into the main tube for final assembly.
16. The process according to claim 15, further comprising the step of mounting spring elements and springs after introducing the inner tube.
17. The telescope according to claim 6, further comprising  
<sup>21</sup> a holder for the crosshair plate, and  
<sup>30</sup> a holder for the index plate that abuts on one of the <sup>23</sup>holder of the crosshair plate or on a component securely connected to the crosshair plate.
18. The telescope according claim 6, further comprising a <sup>48</sup>spring element that cooperates with the <sup>39</sup>adjusting element.
19. The telescope according claim 6, comprising a <sup>5</sup>reversal system comprising a <sup>9</sup>holder,  
 wherein the <sup>19</sup>crosshair plate is securely connected to the holder of the reversal system.
20. The telescope according to claim 6, comprising  
<sup>21</sup> a holder for the crosshair plate,  
<sup>30</sup> a holder for the index plate, and  
 a lateral guide on the holder for the crosshair plate and on the holder for the

index plate.

21. The telescope according to claim 6, wherein the crosshair plate and the index plate are spaced at a constant distance of less than 0.1 mm.
22. The telescope according to claim 6, wherein the index plate comprises line markings and vertical distances between individual lines of the line markings are different in magnitude.
23. A process for producing a telescope according to claim 6, comprising the steps of pre-assembling the index plate and the crosshair plate outside the main tube.